

Haven, Conn.; paratype—United States National Museum.

Described from two females and one male reared from a species of *Caryomyia* gall June 25, 1929, by Dr. E. P. Felt of the Bartlett Tree Research Laboratory, Stamford, Conn. Specimens and description reviewed by A. B. Gahan of the United States National Museum.

STRUCTURAL ANOMALIES IN SPIDERS.

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Because of their extreme rarity it is thought worthy of noting the following two cases which have come to hand. A young specimen of an amaurobiid, (*Callioplus* sp.?), collected by Prof. A. Petrunkevitch at New Haven, Ct., Apr. 13, 1935, shows a complete absence on the right side of the posterior median and lateral eyes, as well as a reduction in the diameter of the anterior lateral to only half that of its mate. The second case concerns a young specimen of *Castianeira cingulata* (C. L. Koch) collected by the writer at Jordan, Ct., in April, 1936. Here the left posterior lateral eye is missing. But more remarkable still is the fact that the left chelicera is somewhat hypertrophied and bears a palp-like, 2-segmented appendage. It arises from the lateral surface of the chelicera, and resembles in size and proportions the tarsus of the pedipalp, but lacks the claw. In addition, the maxillary endite is reduced in size and fused to the chelicera, thus exaggerating the latter's hypertrophy.

Since the three pairs of indirect eyes of spiders develop from the second embryonic somite it is evident that in the first case cited the right half of this region in the embryo had been injured in some way. The missing eye in the second case might be accounted for by assuming an injury to the left side, a stimulus which somehow also led to the development and persistence of the extra appendage. As the chelicerae are homologous, not with insect mandibles, but with the crustacean second antennae, which are biramous, it is possible that the appendage represents one of these rami. There is also the possibility that the structure represents the rudimentary appendage of the evanescent third cephalic somite which lies between that of the indirect eyes (second) and the cheliceral (fourth) somite.